

10/032897

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|                  | US Pre-Grant Publication Full-Text Database |   |
|                  | JPO Abstracts Database                      |   |
|                  | EPO Abstracts Database                      |   |
|                  | Derwent World Patents Index                 |   |
|                  | IBM Technical Disclosure Bulletins          | ▼ |

  

|              |                     |   |
|--------------|---------------------|---|
| <b>Term:</b> | viral quasi-species | ▲ |
|              |                     | ▼ |

  

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|-----------------|---------------------------------|-------------------------------------|--------------------------------|-----------------------------|--------------------------------|
| <b>Display:</b> | <input type="text" value="10"/> | <b>Documents in Display Format:</b> | <input type="text" value="-"/> | <b>Starting with Number</b> | <input type="text" value="1"/> |
|-----------------|---------------------------------|-------------------------------------|--------------------------------|-----------------------------|--------------------------------|

  

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| <b>Generate:</b> | <input type="radio"/> Hit List | <input checked="" type="radio"/> Hit Count | <input type="radio"/> Side by Side | <input type="radio"/> Image |
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| <input type="button" value="Main Menu"/> | <input type="button" value="Show S Numbers"/> | <input type="button" value="Edit S Numbers"/> | <input type="button" value="Preferences"/> | <input type="button" value="Cases"/> |
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**Search History**

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**DATE:** Tuesday, November 26, 2002    [Printable Copy](#)    [Create Case](#)

| <u>Set Name</u><br>side by side                 | <u>Query</u>        | <u>Hit Count</u> | <u>Set Name</u><br>result set |
|---|---------------------|------------------|-------------------------------|
| <i>DB=USPT,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ</i> |                     |                  |                               |
| <u>L1</u>                                       | viral quasi-species | 7                | <u>L1</u>                     |

END OF SEARCH HISTORY

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**Search Results - Record(s) 1 through 7 of 7 returned.**

- ☐ 1. 6423516. 22 Mar 96; 23 Jul 02. Process and agent for instabilizing viral quasi-species-distributions avoiding resistance phenomena. Eigen; Manfred, et al. 435/91.2; 435/235.1 435/456 435/6 435/91.33 436/94 536/23.1 536/23.5 536/23.72. C12P019/34 C12P007/34 C12Q001/68 C07H021/04 C07H021/02.
- ☐ 2. 6242187. 10 Aug 99; 05 Jun 01. Compositions and methods for determining anti-viral drug susceptibility and resistance and anti-viral drug screening. Capon; Daniel J., et al. 435/6; 435/320.1 435/369 435/370. C12Q001/68.
- ☐ 3. 5837464. 29 Jan 97; 17 Nov 98. Compositions and methods for determining anti-viral drug susceptibility and resistance and anti-viral drug screening. Capon; Daniel, et al. 435/6; 435/320.1 435/369. C12Q001/68.
- ☐ 4. EP 1233062 A2. 02 Jul 93. 21 Aug 02. Destabilisation of viral quasi-species distributions - avoiding resistance phenomena. EIGEN, MANFRED, et al. C12N015/00; C12N007/00 C12N015/11.
- ☐ 5. WO 9401545 A1. 02 Jul 93. 20 Jan 94. UNSTABILISING VIRAL QUASI-SPECIES DISTRIBUTIONS FOR AVOIDING RESISTANCE PHENOMENA. EIGEN, MANFRED, et al. 435/6 435/235.1 435/FOR.125 536/23.1. C12N015/00; C12N007/00 C12N015/11.
- ☐ 6. WO 200183815 A1 AU 200156362 A. Detecting minority genomes in viral quasi-species, useful for identifying mutants responsible for drug resistance and to individualize therapy. ARIAS ESTEBAN, A, et al. C12Q001/68.
- ☐ 7. DE 4222289 C1 WO 9401545 A1 AU 9345633 A EP 651796 A1 JP 08501926 W US 20020107220 A1 US 6423516 B1 EP 1233062 A2. Destabilisation of viral quasi-species distributions - using defective replication system which has greater nucleotide miscopy rate then viral wild-type replication system useful for treating viral infections. BIEBRICHER, C, et al. A61K031/70 A61K035/76 A61K048/00 C07H021/02 C07H021/04 C12N007/00 C12N007/01 C12N007/04 C12N007/06 C12N015/00 C12N015/09 C12N015/11 C12N015/33 C12P007/34 C12P019/34 C12Q001/68.

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| Term   | Documents |
|--|-----------|
| VIRAL.DWPI,EPAB,JPAB,USPT.                     | 54537     |
| VIRALS.DWPI,EPAB,JPAB,USPT.                    | 312       |
| QUASI-SPECIES.DWPI,EPAB,JPAB,USPT.             | 51        |
| QUASI-SPECY                                    | 0         |
| QUASI-SPECYS                                   | 0         |
| (VIRAL ADJ QUASI-SPECIES).USPT,JPAB,EPAB,DWPI. | 7         |
| (VIRAL QUASI-SPECIES).USPT,JPAB,EPAB,DWPI.     | 7         |

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FILE 'BIOSIS' ENTERED AT 15:42:21 ON 26 NOV 2002  
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=> s viral quasi-specie#  
L1 37 VIRAL QUASI-SPECIE#  
  
=> s l1 and misincorporat###  
L2 0 L1 AND MISINCOPORAT###  
  
=> s l1 and misincorporat###  
L3 1 L1 AND MISINCOPORAT###  
  
=> s l3 and antimetabolite#  
L4 0 L3 AND ANTIMETABOLITE#  
  
=> s l3 and rate#  
L5 1 L3 AND RATE#  
  
=> s l5 and wild  
L6 1 L5 AND WILD  
  
=> d l6 1 bib ab kwic

L6 ANSWER 1 OF 1 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
AN 2002:487349 BIOSIS  
DN PREV200200487349  
TI Process and agent for instabilizing **viral quasi-species**-distributions avoiding resistance phenomena.  
AU Eigen, Manfred (1); Schwienhorst, Andreas; Biebricher, Christof; Lindemann, Bjorn; Domingo, Esteban; Holland, John; Henco, Karsten  
CS (1) Gottingen Germany  
ASSIGNEE: Evotec BioSystems AG, Hamburg, Germany  
PI US 6423516 July 23, 2002  
SO Official Gazette of the United States Patent and Trademark Office Patents, (July 23, 2002) Vol. 1260, No. 4, pp. No Pagination.  
<http://www.uspto.gov/web/menu/patdata.html>. e-file.  
ISSN: 0098-1133.  
DT Patent  
LA English  
AB A process for instabilizing **viral quasi-species**-distributions under avoidance of resistance phenomena by replication of the nucleic acids of the viruses present in the quasi-species-distribution by of a defective replication system, a) whereby the defective replication system has a **rate** of **misincorporation** for nucleotides above the **rate** of **misincorporation** of the viral **wild**-type-replication system and, whereby the viruses are replicated by the replication system having the higher **rate** of **misincorporation** at least as effectively as it is done by the replication system of the **wild**-type virus, b) and/or negative influence of the replication of the

consensus-sequence (nucleic acid sequence of the **wild-type** virus) in relation to other replicatable nucleic acids.

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IT Miscellaneous Descriptors  
 defective replication system: nucleotide **misincorporation rate**; resistance phenomena avoidance; **viral quasi-species**-distributions: instabilizing process

=> s l1 and antimetabolite#  
 L7 0 L1 AND ANTIMETABOLITE#

=> s l1 and wild  
 L8 2 L1 AND WILD

=> s l8 and rate#  
 L9 2 L8 AND RATE#

=> s l9 and destabil#####  
 L10 0 L9 AND DESTABIL#####

=> d l9 1-2 bib ab kwic

L9 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS

AN 1994:290084 CAPLUS

DN 120:290084

TI Method and system for destabilization of **viral quasi-species** population without increasing resistance

IN Eigen, Manfred; Schwienhorst, Andreas; Biebricher, Christof; Lindemann, Bjoern; Domingo, Esteban; Holland, John; Henco, Karsten

PA Diagen Institut fuer Molekularbiologische Diagnostik GmbH, Germany

SO Ger., 18 pp.

CODEN: GWXXAW

DT Patent

LA German

FAN.CNT 1

|    | PATENT NO.  | KIND | DATE   | APPLICATION NO. | DATE     |
|----|-------------|------|--|-----------------|----------|
| PI | DE 4222289  | C1   | 19940105   | DE 1992-4222289 | 19920707 |
|    | WO 9401545  | A1   | 19940120   | WO 1993-EP1711  | 19930702 |
|    | W:          |      | AU, BB, BG, BR, BY, CA, CZ, FI, HU, JP, KP, KR, KZ, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, US, VN             |                 |          |
|    | RW:         |      | AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG |                 |          |
|    | AU 9345633  | A1   | 19940131   | AU 1993-45633   | 19930702 |
|    | EP 651796   | A1   | 19950510   | EP 1993-915776  | 19930702 |
|    | R:          |      | AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE   |                 |          |
|    | JP 08501926 | T2   | 19960305   | JP 1993-502923  | 19930702 |
|    | EP 1233062  | A2   | 20020821   | EP 2002-1327    | 19930702 |
|    | R:          |      | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE   |                 |          |

|      |                 |    |          |                |          |
|------|-----------------|----|----------|----------------|----------|
|      | US 6423516      | B1 | 20020723 | US 1996-362604 | 19960322 |
|      | US 2002107220   | A1 | 20020808 | US 2001-32897  | 20011025 |
| PRAI | DE 1992-4222289 | A  | 19920707 |                |          |
|      | EP 1993-915776  | A3 | 19930702 |                |          |
|      | WO 1993-EP1711  | A  | 19930702 |                |          |
|      | US 1996-362604  | A3 | 19960322 |                |          |

AB The title method comprises replication of the nucleic acid of the quasi-species population with an error-prone replication system. The replication system has a nucleotide incorporation error **rate** greater than that of the **wild-type** replication system but viruses with both replication systems replicate equally well; and/or the replication of the consensus sequence (of the **wild-type** virus) is neg. influenced relative to variants thereof.

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AN 2002:487349 BIOSIS

DN PREV200200487349

TI Process and agent for instabilizing **viral quasi-species**-distributions avoiding resistance phenomena.

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 ISSN: 0098-1133.

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negative influence of the replication of the consensus-sequence (nucleic acid sequence of the **wild-type** virus) in relation to other replicatable nucleic acids.

IT Miscellaneous Descriptors

defective replication system: nucleotide misincorporation **rate**  
; resistance phenomena avoidance; **viral quasi-**  
**species-distributions**: instabilizing process

=>